DOCUMENT RESUME

ED 097 925 JC 740 419

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TITLE	Faculty Workload. Topical Paper No. 46.
INSTITUTION	California Univ., Los Angeles. ERIC Clearinghouse for Junior Coll. Information.
SPONS AGENCY	National Inst. of Education (DHEW), Washington, D.C.
PUB DATE	Oct 74
NOTE	25p.
EDRS PRICE	MF-$0.75 HC-$1.85 PLUS POSTAGE
DESCRIPTORS	Collective Bargaining; *College Faculty; *Community Colleges; Cost Effectiveness; Post Secondary Education; Student Teacher Ratio; *Teacher Attitudes; Teacher Participation; *Teaching Load; *Teaching Quality; Technical Reports

ABSTRACT

Various aspects of faculty workload are reviewed, with emphasis on definitions of workload and on major problems in developing workload formulas. Attention is also given to the erosion of parietal policies, the quality versus quantity issue, and the effect of collective bargaining on workloads. For most instructors, the important factors are the number of credit or contact hours assigned per week and the number of students in each class, with credit or contact hours having greater significance to the faculty. Although workload formulas have been developed, they still approximate the number of weekly contact hours. Hourly loads are lower today than they were in the 1950's and earlier. Faculties object strenuously to the practice of equating workload to quantitative criteria, particularly number of contact hours, student-faculty ratios, and average class size. Parietal regulations are still found in many statements of college policies, and are based on the principle that teaching is a full-time occupation. In light of the strong tradition equating low or moderate workloads with quality, administrators face a formidable task in their efforts to increase the loads. Within the limits set by state laws and state administrative regulations, faculty are participating in the initial determination and subsequent reappraisal of workloads, as recommended by the 1969 AAUP Statement of Faculty Workload. New teaching methods and technologies have made it necessary to modify the faculty load formulas. Faculty fear that the major purpose of introducing the new teaching/learning modes is to increase faculty productivity, which will, in turn, lead to the use of fewer instructors. (DB)

U.S. DEPARTMENT OF HEALTH
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

FACULTY WORKLOAD

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Topical Paper No. 46
October 1974

The material in this Topical Paper was prepared pursuant to a contract with the National Institute of Education, U.S. Department of Health, Education and Welfare. Contractors undertaking such projects under government sponsorship are encouraged to express freely their judgment in professional and technical matters. Prior to publication, the manuscript was submitted to the Florida Association of Community Colleges for critical review and determination of professional competence. This publication has met such standards. Points of view or opinions, however, do not necessarily represent the official view or opinions of either the Florida Association of Community Colleges or the National Institute of Education.

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46. *Faculty Workload*. Oct 1974.

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FACULTY WORKLOAD

by
John Lombardi

Faculty workload receives intermittent attention by faculty, administrators, governors, legislators and economists. During the 1950's the faculty and their professional organizations called attention to what they considered unreasonable workloads — workloads that were derived, with modifications, from high school practices — and strived for limits on the maximum that could be assigned. State guidelines as well as accrediting association standards tended to place a maximum on teacher loads. But in the 1960's, as costs of education increased, as resistance to higher taxes grew, and as college finances deteriorated, attention to faculty workload came primarily from administrators, governors, legislators and economists. Asserting that higher education cannot continue indefinitely as a highly labor-intensive enterprise, they sought — and continue to seek — minimum loads for the staff. Whether or not, as they claim, the ultimate solution for restoring the colleges' financial health depends on an increase in faculty workload, they have claimed center stage.

Two major issues are apparent. One is quality versus quantity, the other is change versus insolvency. Faculty and other educators contend quality will be sacrificed if higher workloads are imposed; the proponents for change challenge this contention and warn that financing education under the normal classroom methods will lead to collapse on a wide scale.

This essay reviews various aspects of faculty workload with emphasis on definitions of workload and on major problems in developing workload formulas. Attention will also be directed to the erosion of parietal policies, the quality versus quantity issue, and the effect of collective bargaining on workloads.

Definition of Workload

In its broadest aspect "faculty load is the sum of all activities which take the time of a college . . . teacher and which are related either directly or indirectly to his professional duties, responsibilities and interest" (Stickler, 1960, p. 80). Foremost among these activities are classroom teaching assignments including preparation of lessons, making and correcting examinations, advising students, selecting texts, library books, and audiovisual materials, and revising courses. In the community college these comprise 90 percent or more of an instructor's time. Other duties

may include membership on college and advisory committees, attendance at faculty and other institutional ceremonial meetings, sponsorship of a group such as a club, forensics, band, choir, theater production, athletic team. Another feature of faculty workload is the amount of time other than for classroom assignments that an instructor must spend on campus.

Workload policies frequently incorporate provisions regarding which duty assignments are part of the instructor's normal responsibilities and which classify as overload assignments requiring some form of extra compensation. Those activities such as coaching a debate or athletic team, directing a play, conducting a band, choir or orchestra which involve fixed time demands are frequently classified as overload, and are compensated by a reduction in regular load or by extra pay. Adjustments in workload are often made for assignments with unusual demands such as teaching a new course, serving on a major college committee, or preparing instructional materials.

For most instructors the important factors are the number of credit or contact hours assigned per week and the number of students in each class. For those instructors engaged in a supervisory or teaching capacity in open learning laboratories, television, independent study, work experience and other methods of teaching and learning, the WSCH unit of measurement is replaced or supplemented by other measures. Weekly Student Contact Hours is a measure of the numbers of students an instructor meets per class hour times the number of hours per week he meets them. In practice it varies widely — from as low as 200 to as high as 1000 or more, with a normal range of 250 to 700. In some collective bargaining agreements with maximum class size restrictions the range is much narrower and the maximum is usually about 400. With increasing frequency a workload that is greater than normal in terms of weekly contact hours or number of students in class results in overload compensation for the instructor.

Credit hours are not always equal to contact or class hours. A credit hour in a subject that requires outside preparation for the instructor or the student is equal to one contact hour. A credit hour in a laboratory shop or performance class that requires no outside preparation is equal to one-half to three-fourths of a contact hour. In a few subjects, particularly English composition or writing classes, a credit hour is worth approximately one and one-third contact hours. This difference between credit and contact hours has led to faculty insistence that workloads be defined in terms of contact hours rather than credit hours. In practice, workloads rarely exceed twenty-five contact hours regardless of which unit is used.

As a measuring rod the credit or contact hour lends itself to a variety of closely related administrative and financial uses. Originally developed to measure the amount of student work done or time spent in high school for college preparation, the credit hour was adopted as a unit for measuring faculty workload, allocating funds by the legislature and determining the cost of education. In general the credit hour unit is basic to the full time student equivalent (FTSE) unit and full time faculty equivalent (FTE). One FTSE is usually equivalent to 24 or 30 credit hours. A full time faculty equivalent represents 24 or 30 credit hours of teaching divided into two or three terms. Finally, since per capita cost is measured in terms of FTSE, the

faculty workload is an important factor influencing the cost of education (Hicks, 1960). Under normal circumstances an increase in faculty workload has an immediate effect in lowering unit and total costs; conversely a reduction results in higher unit and total costs.

Second to contact hours in importance is class size as a measure of faculty workload. As with contact hours the size of a class may be weighted according to the subject, with the highest weight to English composition and speech among academic subjects and nursing clinical classes among the laboratory classes. At the other extreme are large performance classes in music and theatre arts, appreciation classes in art and music, orientation classes and physical education activity classes. Laboratory classes are usually limited in size to the number of student stations. Lecture classes exceeding fifty students are often given a higher weight depending upon the number of students above fifty. Less frequently, a small class below the normal size for the subject is weighted at less than one, thus requiring some extra assignment in terms of contact hours, non-classroom activity, or increase in class size in the other classes.

Credit or contact hours has greater significance to faculty than class size, because they are fixed time demands over which he has little control. Within limits the size of the class causes little concern since the time demands do not vary directly to the number of students. With the other activities making up his load the instructor has greater control in the time and energy he may wish to devote to them. Consequently, there is likely to be greater attention to weekly hours assigned than to the other variables when discussions on policy or negotiations on renewal of contracts take place.

Workload Formulas

Attempts have been made to develop load formulas that include all of the instructor's duties, recognizing that "the teacher normally spends far less time in the classroom than in preparation, conferences, grading of papers, and examinations, and supervision of remedial or advanced student work" (AAUP Bulletin, 1970, p. 30). Yet, the formulas, especially when developed from information obtained through questionnaires completed by instructors are of questionable value and have been characterized as amorphous, bulging and self-justifying (Enochs, 1960). In these formulas often adding up to 58 to 84 hours per week, Caplow points out "it is impossible to distinguish what is useful to the college and what is useful only to the individual, and what is useful to both" (1960, p. 70). He wonders if practicing law or accounting or writing a text is engaged in to improve teaching or to supplement income.

Although workload formulas are interesting because they attempt to create a scientific basis for workload standards, the result, no matter what method is used, approximates the current practice in the number of teaching hours. In the 1950's 20 weekly contact hours was the norm so formulas usually worked out around 20 with a range of 15—25, reaching 30 in a few trade classes. Today's formulas yield

a weekly class hour load between 12 and 18 hours. Thus, in a formula devised by Professor Lloyd N. Morrisett of the University of California in 1952 for Pasadena City College, English composition had a weighted value of 1.33; physical education activity 0.8. Since the normal teaching load under the Morrisett formulas was 20 hours per week, a teacher assigned composition classes, each meeting three hours a week, needed only five sections for a full load because 5x3x1.33=20. At the other extreme, a physical education instructor teaching all activity classes, each meeting five hours a week, needed five sections for a full load because 5x5x0.8=20. The actual hourly load was 15 for the English instructor and 25 for the physical education instructor. Similar formulas were developed at Long Beach City College (1954) and San Francisco City College (1954). Most of the formulas had other variables but for the great majority of the faculty the results did not deviate significantly from the number of weekly contact hours prevalent at the time.

A simple teaching load formula has been employed by the Los Angeles City Community Colleges since 1950. The weekly contact hour load varies from 15 for a program of lecture classes to 20 for laboratory classes. Instructors with a mixed program of lecture and laboratory classes usually teach 17 or 18 hours per week. Rarely is a full-time classroom instructor assigned more than 20 hours. The Los Angeles formula also contains a minimum WSCH of 450. If an instructor with a 15-hour load does not meet the 450 student-hour standard, he may be assigned another 2- or 3-hour class, or some other equivalent college duty, usually the latter. Only two modifications have been made — one reduced the hour load to 12 for English composition instructors and the other eliminated for some departments the differential between laboratory and lecture classes. The formula or policy contains the usual provisions for maintenance of office hours for student consultation and for the instructor's presence on campus 6 hours a day, five days a week.

Status of Faculty Workload

Almost universally, hourly loads are lower today than they were in the fifties and earlier, a phenomenon that is well docuented and that antedates the era of collective bargaining. A Carnegie Commission study (1972) reported a decline in median teaching loads from 17.8—18.2 hours in 1931 to 15.1 hours in 1969. In California the average weekly hour load has gone down from a range of 18.2—29.6 in 1952 to 15—20 in 1972 (Contra Costa District, June 1953; Wagner, May 1972). The mean hour loads for 1966 and 1969 in Illinois went down from 16 to 14 (Martin and Thornblad, 1970). The Chicago Colleges and Onondaga College and Fashion Institute of Technology in New York State have institution-wide 12 to 13 hour loads (McHugh and O'Sullivan, 1971). In many colleges instructors of English composition also have 12 hour loads. Gradually, laboratory classes are being equated with lecture classes on a one-to-one ratio.

In most colleges a percentage distribution of workloads would be similar to the following pattern found in a survey of Texas colleges for 1973—74: (Wallace and Tunnell, 1974)

Credit Hours	12	15	15.5	16.5
Percent of Faculty	2.5	80	2.5	15

Occupational instructors usually work 25 contact hours.

The weekly student hour loads seem to have stabilized at the 12 to 16 hour range. Administrative resistance to lower hour loads has been strong and up to 1974 successful. Changes in workloads are being effected in class size. In the traditional classroom teaching setting, the faculty have succeeded in reducing class size to a range of 20 to 50 with a mode of 30 to 35. However, by trading higher class size for lower weekly hours, large classes of 60 to 100 or more are becoming common. Some collective bargaining contracts and college policies contain formulas providing a scale equating weekly hours inversely to size. Under these formulas weekly hour loads can be reduced to one, theoretically, but rarely go below nine.

The importance of the student contact load derives from its close relationship with the pattern of state reimbursement which is based on the number of full time student equivalents (FTSE) enrolled, usually for 12 or 15 credit hours per week per year. Thus, to use a simplified example, if the average instructor's salary is $15,000 per year and the college receives $1500 per FTE, then each instructor must be responsible for 12.5 or 10 students respectively just to meet the expense of his salary which accounts for 50 percent of the cost of instruction. Doubling the number to 25 or 20 respectively will enable the college to balance the budget with no reserve for emergencies unless the reserve is included in the 50 percent of other costs.

Objections to Quantitative Measurement of Workload

Faculty object strenuously to the practice of equating workload to quantitative criteria, particularly number of contact hours, student-faculty ratios, and average class size. They do not accept the assumption of legislators and administrators "that the costs to teachers for their services and the value to students of their learning both alike increase in direct proportion to the number of hours spent in the classroom" (Schellengberg, 1973, p. 163). In fact they maintain that the converse is closer to the truth, that learning increases inversely to the number of hours spent in the classroom and the number of students in the class. Additionally, they view the use of credit or contact hours to measure workload and faculty workload formulas in general "as devices in the hands of management," (Bunnell, 1960, p. viii) who presume "that students are little more than inanimate objects within a time and

motion study" (*Read On*, 1972, p. 1). To them, cost effectiveness is just another attempt "to reduce operating expenses at the cost of quality education" (Brightman, 1971, p. 58).

Paradoxically, at the same time that they raise objections to the use of numerical units and formulas, faculty, either because they are not able to devise a better method or because the numerical formulas are so easy to apply, insist on incorporating them in contracts. All workload studies conducted by faculty groups and nearly every collective bargaining agreement use the contact or credit hour, average class size, and weekly student hours as the units of measurement in determining faculty workload. Even with all of its qualifications and caveats on quality the 1969 AAUP Statement on Faculty Workload (AAUP Bulletin, 1970, p. 31) relies heavily on quantitative teaching hours per week as the measure of workload.

In community colleges it would be extremely difficult to avoid numerical, quantitative measures in determining faculty workload, since the colleges' primary mission is teaching and measuring the quality of teaching has not gone beyond the testimonial stage. Although there has been a flurry of interest during the past five years or so on "accountability," measurement or evaluation of the quality of instruction and effectiveness of instructors has made little progress. Many legislators who passed laws recently for the improvement of instruction through evaluation of instructors are already expressing disappointment with the results.

Ignorance of how learning takes place and faculty resistance to merit rating are the two major obstacles to the development of qualitative measurement of instruction and instructor workload. Accordingly, administrators and legislators resort to measurement of the instructors' value to students and society by the number of hours they teach and the number of students in their classes. Actually, instructors object less to quantitative measures as such than to the amount that administrators and legislators consider a reasonable workload.

To get around the "danger of collision with reality," Toombs (1971) suggests a symbolic work week of 40 or 48 hours as a faculty workload formula in which percentages or units are assigned to various responsibilities. Such a formula may help dissipate the public's belief that a faculty workload consists only of the 15 or 20 contact classroom hours. How successful this will be is open to question. It may have some value in changing the basic teaching load where instructors demonstrate that some subjects are more difficult to teach or require more time for preparation or for grading papers.

Parietal Regulations

A large number, probably the great majority, of college workload standards contain clauses requiring an instructor to schedule three to ten hours for student consultation and to spend five or six hours a day on campus, five days a week. These rules date back to the time when colleges were still closely associated with the high school, faculty loads were in the 20 to 30 plus hour range, and instructors

were assigned a group of students as advisees, had to sign in and out each day and certify at the end of the week that they had met their classes, performed other duties, and spent the required number of hours per day and days per week on campus. In some states the principle from which these rules are derived was (and still is) included in the laws governing community colleges. Enforcement was relatively easy prior to 1950 since an instructor's absence from class was usually reported by students and the free time between classes was not long enough to permit extended absence from the campus.

These parietal regulations are still found in many statements of college policies and are based on the principle that teaching is a full-time occupation; that the college "owns the instructor and his life is the college's life" (Axt, 1960, p. 13). However, the regulations are not so easily enforceable today because the lower workloads (rarely exceeding 20 hours per week with the great majority in the 12— to 16—hour range) permit instructors so inclined to teach in other institutions or work in other occupations. A few carry on their activities on campus selling insurance, mutual funds, real estate, or packaged travel tours.

Moonlighting is not a recent development in the community colleges. Many instructors have always supplemented their salaries by part-time teaching or by other employment, but nearly always during the evening hours, weekends or summer. In fact, colleges encouraged institutional moonlighting by giving day instructors preference to evening assignments, a practice that benefited the institutions, the instructors and the students. The college obtained the services of experienced instructors at rates of pay as low as one-half the day rates; the instructors had a ready source of extra pay for work that required very little extra preparation; and evening students received almost the same quality of instruction as day students. For the colleges the overtime pay may also have kept the faculty from making excessive demands for higher pay.

A limited amount of moonlighting also is possible on campus where colleges pay instructors to substitute for instructors absent on short-term leaves of a day or two. The classes of the absent instructor are usually apportioned among two or three instructors. This arrangement inures to the advantage of the college, the instructor and the students. Of course, in earlier years when faculty were not as well organized as they are today they did this substituting without pay.

How much day-time moonlighting goes on during the regular college year is difficult to determine. A 1969 survey reported that 25 percent of the faculty served as paid consultants during the previous two years (Carnegie Commission on Higher Education, 1972). One can surmise that other forms of paid activity are common enough to cause legislatures and administrators to go to some effort to control it. Michigan, for example, has a law that "a community or junior college may not pay any employee, faculty member or administrator for time spent in the employ of, or in a contractual agreement with any other college, community college, university, governmental agency, except elected officials, nonprofit organizations, foundation or private firm or corporation, without specific written permission of the board of trustees of the . . . college where the employee, faculty member or administrator is employed" (Sec. 21, Act No. 121, Public Acts of 1971).

Similarly, but not explicitly, in 1971 the Lansing Community College (Michigan) negotiators attempted to achieve the same objective by a paragraph in the agreement which reads:

> Teaching is a profession and this demands that faculty members consider their position at the College as a full-time occupation. The Association recognizes that it, too, is an advocate of this concept. If instances occur where it becomes apparent that a faculty member is violating the spirit and intent of this concept, either the Association or the administration shall make the facts known to each other and shall jointly recommend appropriate action. If the administration and the Association do not agree on the disposition of the matter, it is then subject to the provisions of the Grievance Procedure. (pp. 13—14).

Following revelations that a few Chicago City Colleges instructors were employed full time in another school, a clause was included in the 1973—1975 collective bargaining agreement that:

> A full-time position in the Colleges is accepted with the understanding that the faculty member will not continue, or at a future date accept, a concurrent full-time position or positions equal to a full-time position with any other employer or employers while he is teaching full-time in the Colleges (p. 22).

Many administrators still subscribe to Axt's (1960) aphorism about the control of the instructor and his life but there is evidence of a shift away from strict control of an instructor's time when he is not scheduled to teach or perform some other assigned duty. An increasing number of administrators are recognizing the professional status of the instructor including his right to direct his energies in whatever direction he desires on- or off-campus.

Thus, the Allegheny County (Pennsylvania) Community College contract states that "When faculty members are not scheduled for classes or other required college meetings they are not required to be on campus" (p. 29) while the Mercer County (New Jersey) Community College contract provides that, "Outside employment conducted during the individual's free time shall be entirely at the discretion of the faculty member and shall be within the prerogative of his professional and personal rights" (p. 37). To quote Axt again this means "show up for these . . . 15 contact hours and this is it" (p. 13). While still not a widespread movement, the trend is away from the strict construction of the campus attendance rules. Some administrators probably find it difficult to justify such control on instructors when they themselves spend a great deal of time consulting, teaching at a university, serving on accreditation teams, and performing other off-campus activities.

Although not going so far as Axt or the Allegheny and Mercer College policies many administrators ignore all but the grossest violations of the campus attendance rules. Exceptions are most likely to be found on small campuses usually located in rural communities and small towns and on a dwindling number of campuses with strict constructionists.

Teaching Load and Quality of Instruction

Until recently, faculty have received support for their contention that quality education depends on reasonable workloads from the prestigious Carnegie Commission on Higher Education. A 1968 Carnegie Commission task force reported that there is no way in the short run to increase productivity, i.e., "educate more students at the same level of expenditure without lowering academic quality," conceding however, that the search "to improve educational productivity without endangering quality should be actively pressed forward . . . " (Carnegie Commission, 1968, p. 6). In another report O'Neil (1971) suggested that "if the observed differences in costs per credit hour do reflect quality, then the public two-year schools would be the lowest quality type of school . . . " (p. 44), although she admits that "in the education industry there are grounds for doubt" that inputs per credit hour reflect quality differences (p. 43). This belief is also held by many administrators who through their membership on state boards and accrediting commissions have supported regulations and guidelines for reasonable teaching loads.

When state systems of community colleges were being formed in the 1950's and early 1960's legislatures and governing agencies set maximum rather than minimum workload standards. Typical are those for the professional staff of Illinois colleges stipulating that the normal teaching load in non-laboratory courses shall be no more than 16 semester or quarter hours, and "the ratio of professional staff to students shall permit a high degree of personal interaction" (Illinois Junior College Board, 1970, p. 28). Aided by similar arguments that quality education goes with low teaching loads and the general belief that junior colleges can and should offer a more personalized atmosphere than the large universities, faculty have had only moderate difficulty in their drive for reduced weekly teaching hours and, to a lesser extent, for lower class size. So ingrained is this belief that even in the midst of a financial crisis a college president pointed out with satisfaction that the average number of weekly student contacts "is gradually being reduced to provide for *more effective* instruction and to approach the district recommended average of 450" (Horton, 1972, p. 18).

In light of the strong tradition equating low or moderate workload with quality, administrators now face a formidable task in their efforts to increase the loads. The absence of criteria for measuring that quality has not diminished the fervor with which this belief is held. They must also contend with strong faculty organizations, college senates, and affiliates of state and national organizations that are

determined to maintain or lower the present workload standards. Indirectly the trend in business and industry toward the 35-hour and 25-hour workweek aids the faculty cause.

Faculty concern in the 1950's was to persuade administrators and state agencies to reduce workload; from the late 1960's to the present it has been to counter efforts of administrators, governors, legislators and economists to increase workload. This change is largely related to the financial difficulties encountered by many colleges. From the Ruml-Morrison concept of 1959 to legislative mandates prescribing minimum workloads to Carnegie Commission Reports the focus has been on the more effective use of faculty ranging from minor changes in workload to drastic reform of the teaching-learning process. Faculty workloads have been singled out in the economy proposals because education is a labor-intensive enterprise in which labor costs comprise 70 to 80 percent of the budget and faculty salary and other faculty expenditures account for 50 percent of total costs of instruction. Economies in other areas are helpful but they do not produce the high returns possible in faculty workload increases.

The Ruml-Morrison solution recommended a substantial increase in the size of classes as the best means of reducing the high costs of instruction. Such a change the authors insisted would also bring about an increase in the prevailing salaries which they claimed were low as a result of the inefficient use of personnel. More modest was the recommendation in the Carnegie Commission Report on *The More Effective Use of Resources* 1972 that "raising the average [student-faculty] ratio by one would, by itself, reduce costs by about 0.3 percent per year per student — or nearly one-third of the total reduction we recommended of one percent per year" (p. 17). For two-year colleges the report suggests that "where median level of student-faculty ratios goes below 19.2 special consideration of measures to increase . . . ratios may be warranted" (p. 85). Some economists assert that the present method of teaching must change, otherwise "if no more students can be taught per teacher the cost of education per student must increase in perpetuity, and the rate of increase will vary directly with the rate of economic growth" until the cost of education will equal the gross national product (Machlup, 1970, p. 95). Schultz (1971) disagrees with those who insist that a quality intensive organization cannot be changed significantly without deterioration. He notes that "the present conventional view that the educational sector is destined to continue as it is in the amount of time required of students and teachers may be as wrong," as a similar view of a few years ago concerning the productivity of farmers and retail employees" (pp. 19-20).

State legislators and governors have attacked the problem of increasing workload by mandating minimum workloads in terms of weekly credit or contact hours and or student credit hours. Indirectly, others have used a faculty-student ratio to increase workloads. The former method is more direct but it leads to inflexibility since adjustments among departments and instructors are difficult to accomplish. The student-faculty ratio leaves a great deal of discretion to the college staffs in adjusting faculty workloads to meet special conditions.

In 1971 Michigan mandated a minimum load of 15 credit hours or 450 student credit hours for a full time faculty member (Michigan Act no. 121 Public Acts of 1971, Sec. 18) while New York, sticking to student-faculty ratio upped it to 17:1 from 15:1 and substituted "minimum" for "maximum" (State University of New York, *Rules and Regulations Governing the Administration of Community Colleges* [p. 12]). The Maryland State Board for Community Colleges recommended in 1973 that the states' community colleges should move to a statewide average of 20:1 student faculty ratio. Supporting its recommendation the Board added: "While it is commonly accepted that gross increases in the ratio of students to faculty will diminish the quality of instruction, there is little evidence to suggest that reasonable increases [from the current 17:1 ratio] are detrimental" (p. 96). A Massachusetts legislative proposal that faculty spend at least 12 hours a week with students in classrooms or laboratories encountered vigorous opposition from the state Board of Higher Education. The Board objected that the proposal restricted an institution's capacity to delivery individual instruction; develop flexible formats for learning; and ignores generally accepted differentials in the effort needed to teach at different levels (Chronicle of Higher Education, June 10, 1974, p. 1).

None of these legislative efforts is intended to change the labor-intensive characteristic of education. They are moderate proposals. Nevertheless, faculty opposition is still strong, fearing that acceptance would lead to more moderate increases every time a financial crisis occurs.

Who Should Define Workload?

Accompanying the question of what is an adequate or proper teacher workload is a related issue: "Who should define the teacher load?" State legislatures and governing boards that prescribe a student-faculty ratio as a standard for instructor assignments influence workloads. While such a ratio gives the institution freedom to adjust instructor workloads depending on the method of instruction, class size, subject matter, or other factors influencing assignments, the ratio places a limit on the number of instructors a college may employ. A seemingly small increase of a ratio from 17:1 to 20:1 reduces the number of instructors by nearly 18 percent. Thus the size of the ratio can influence not only the workload formulas but indirectly the programs a college will offer. Departments with low student-faculty ratios may be restricted and even phased out if other departments are unable or unwilling to increase their student-faculty ratios to produce the minimum average.

A strong plea for giving this responsibility to the teachers was made in 1952 by Dean Willard B. Spalding of the College of Education, University of Illinois who contended that:

> The public already accepts the idea of minimum conditions for employment. The requirements of the medical profession are readily met.

> Skilled tradesmen set not only conditions of employment but limits on production, viz., the maximum number of bricks which can be laid in a day or the maximum width allowed in paint brushes. We have allocated crop production quotas to farmers and specified conditions under which soil can be tilled if they are to receive maximum rewards. Waiters in the union can only wait on so many people at the tables. Many other illustrations undoubtedly will come to the mind of each reader. There is no reason to suppose that the general public would refuse to grant the teaching profession the right to define minimum conditions for employment when it had already granted this right to so many other among its members.

Although Spalding's ideal has not yet been accepted in the community colleges and has even been challenged by state legislatures for all segments of higher education, establishing faculty workloads is no longer the exclusive prerogative of administrators as it was for many years. Within the limits set by state laws and state administrative regulations faculty are participating in the initial determination and subsequent reappraisal of workloads as recommended by the 1969 AAUP Statement on Faculty Workload. The AAUP recommendation of full participation is achieved most closely in colleges operating under collective bargaining (AAUP Bulletin, 1970). A serious confrontation developed in Michigan when the legislature set minimum workloads for the various segments, but this involved primarily the universities which successfully claimed that the legislature had no jurisdiction over a university established by the constitution. Community colleges, however, as creatures of the legislature could not make such a claim. Though the legislature lost in the university case it had the last word when it came to appropriating funds. And herein lies its strongest weapon, the power of the purse, a lesson that is not lost on faculty organizations. If a confrontation should develop between a faculty organization and the colleges on a workload issue the legislature, with public support, could force a change. Faculty organizations counter this by supporting legislative candidates who favor their cause. With friendly legislators and aid from lobbyists of other public employee groups, the faculty have been successful in preventing drastic changes in current workloads.

New Workloads for New Teaching Technologies

The widespread introduction of new teaching methods and technologies has made it necessary to modify the faculty load formulas. In some cases this involves primarily a reduction in contact hours to compensate for larger than normal class size; in others the usual load formulas do not apply. A few illustrations will indicate the changes that are being made.

Under terms of the Mercer Community College (New Jersey) collective bargaining contract the normal load is 15 contact hours for theory, lecture, and classroom instruction, 20 for laboratory, shop, studio or clinic, and 18 for a combination of the two. However, "a normal load shall consist of 12 hours if the instructor is responsible for a minimum of 600 WSCH during the 12 hours. If within nine contact hours the instructor's WSCH reaches a minimum of 900 then his normal load is nine contact hours. Under any circumstances each two hours of each group instruction of 100 or more students are considered as three hours in calculating normal load." Compensation for overload is based on academic rank and semester contact teaching hours. Similar plans for adjusting workload formulas are in effect in other colleges.

Instruction conducted under the various auto-tutorial, open laboratory, other media using mechanical and electronic devices, self-instructional materials and paraprofessionals requires instructor time primarily for planning and developing programs and for selecting the "hardware" (equipment, tapes, projects, receivers, etc.) for student use. Supervision of tutors, aides, technicians, laboratory assistants and other supporting personnel becomes an important duty where extensive use is made of the new teaching technologies. Group instruction is limited usually to small class discussions whenever an instructor determines that it would help the students.

When these new teaching technologies are used, the number of students enrolled is higher than in the traditional classroom situation, though lower than in televised instruction. Also common is the scheduling of multiple classes covering different subjects in the same laboratory or media center. Another feature is the flexibility for students who may attend at any time, day or evening that the facility is open. For these instructors allocation of time and the WSCH are the primary considerations in workload. Class size has little meaning. The weekly hour load may be larger than the customary 12 to 15. Also, such instructors may be employed on a yearly contract rather than on an academic year calendar. Twenty-five to thirty-five weekly hour contracts may become the norm for instructors in this group. At South Oklahoma City Junior College which opened in 1972 instructors signed yearly contracts committing them to the auto-tutorial method of instruction and to a production of 1200 weekly student contact hours. (Cleek, 1972)

In some situations instructor time may be reduced to a minimum involving little more than an instructor's presence nearby for occasional consultation with student or paraprofessional. At Orange Coast College (California) a learning laboratory equipped for 250 students enrolled in basic arithmetic, elementary algebra or trigonometry is supervised by a paraprofessional. Instructor time assigned is three hours per week distributed among six instructors who have offices nearby for ready consultation. (Fitzgerald, 1972)

Loads for television instructors deviate even more markedly from the common workload formula. Not even the WSCH is a factor since its size in television classes goes far beyond anything envisaged in the formulas for classroom or auto-torial instructional methods. Class size has little meaning, the expectation is that many hundreds of students will enroll and other hundreds will view the pro-

ram without enrolling. Moreover, once produced, a videotaped lecture may be repeated many times, which raises questions involving the instructor's residual rights. Other questions arise when tapes are offered for sale to or exchanged with other colleges.

No uniform load formula has been developed for televised courses. In general an instructor assigned to the production of a video tape is relieved of all classroom duties during the semester or year that it may take to prepare and produce the lectures or demonstrations. During the semester the video tape is broadcast, the instructor may be awarded a number of contact hours for the purpose of evaluating and recommending changes in the production.

Examples of television instructor workload at two districts illustrate the formulas evolving. The television instructor workload at Chicago TV College consists of course preparation, pre-recording or live preparation, and coordination of course activities. For preparation prior to studio presentation the instructor is assigned a full summer term equivalent of six hours or half a semester assignment. For pre-recording the initial studio presentation the instructor is relieved of all regular teaching assignments during the semester. In terms of contact hours this amounts to 18 or three-fourths of a full year's assignment of 24 hours. Each time the course is telecast the instructor receives three hours time for coordinating course activities of the supporting television instructors. (A Fifth Report, 1974)

For live presentation of a three credit hour course during a fall semester the instructor receives the summer assignment of six contact hours, three contact hours during the preceding spring semester, the full semester assignment of 12 hours during the presentation, plus three hours as overtime assignment. This amounts to 24 contact hours or the equivalent of a one-year assignment.

Re-telecast of telecourses requires written consent of the instructor. If the instructor consents to a re-telecast he is given a summer session assignment equivalent to six hours for reviewing and editing recorded series. For any subsequent reuse the instructor is allowed one-half or three hours of a summer term assignment.

Release for outside use to *bona fide* college level institutions shall have the consent of the faculty member. If within three academic years ten such uses are made the instructor receives extra compensation equivalent to one-half summer assignment or 3 hours.

At Coast Community College District (California) the workload assignment for a television instructor is simpler. He receives two years released time for development and recording a course with no provision for residual rights. The telecourse is the property of the district.

For most television courses additional instructors are assigned to supply supporting services to the large number of students enrolled. These instructors, called supporting instructors or facilitators, conduct scheduled on-campus class sessions, maintain office hours for personal and telephone interviews, administer midterm and final examinations, grade papers, and perform other duties relating to the needs of students or requirements of the course.

A supporting instructor in the Chicago system receives compensation in accordance with the amount and kind of work he performs. Faculty members in skill subjects such as foreign language, speech, secretarial, English composition or writing are assigned a group of students whom they meet in scheduled on-campus class sections or whose written assignments they grade and return. For this the TV load is equivalent to three contact class hours for each group of two classes scheduled for 100 minutes, each meeting consecutively on the same day for not more than eight meetings. Eight four hour laboratory sessions are considered the equivalent of one on-campus laboratory class. Supporting instructors who are not required to meet students at scheduled on-campus meetings or to grade and return written work at regular intervals are paid "in accordance with the amount of direct supporting instruction involved by agreement between the TV College Dean or his delegate and the teacher concerned" (Chicago Agreement, 1973. p. 51) On-campus class sizes are in accordance with evening size standards, usually 39 with the exception that speech classes shall be limited to 20 and English composition to 29.

A television facilitator at Coast Community College District is allotted five hours per week for taking care of up to 350 students assigned. For each additional 70 students he is given another hour with a maximum overload of 700 students for a ten hour week paid for at the rate of 1/1000 of his annual salary per hour. A member of the faculty who does not have a full-time day load may be assigned as a television facilitator at the rate of 350 students for three hours of class time.

As is the practice in many colleges the pay for the overload assignment is at a lower rate than that for an equivalent normal assignment. Assuming a yearly salary of $15,000, the remuneration for semester overload assignment is $900 ($15,000 ÷ 100 x 3 hours x 20 weeks). For a normal assignment it could be as high as $1500 a semester for an instructor whose normal load is 15 hours per week ($15,000 x 3/15 ÷ 2 semesters); $1250 for an instructor with a normal load of 18 hours per week. The higher hourly rate for day instructors may be justified on the grounds that he has other duties and that his workload assignment is 25 or 30 hours per week. Using 25 hours as the time assignment his pay would be $15,000 x 3/25 ÷ 2 or $900, the same as for an overload assignment.

Since Chicago TV College is the only institution conducting a full schedule of television courses comparisons of workloads would not be valid. Most other colleges produce only a few television courses. In general, the Coast Community College District workload policy of an assignment covering a specified period is the prevailing one in community colleges. A few colleges share with the instructor any returns from the sale or lease of the production.

In summing up this brief discussion of new workload formulas, several observations are in order. Except in minor instances not much change in the labor-intensive characteristic of teaching has taken place. Probably, greater faculty productivity is accomplished through an increase in class size in the traditional classroom pattern than in the use of new forms of teaching-learning methods. Nevertheless, the potential of the new forms for changing the labor-intensive characteristics and workload patterns remains as illustrated in the examples cited.

Television instruction continues to arouse interest as an avenue for increased faculty productivity. However, if the expectations are to be fulfilled the Coast Community College District policy of paying the telecast instructor a fixed sum for producing the telecast without residual rights has the greater likelihood of success than the Chicago TV College policy. Under the Chicago TV College pattern, unit cost of $40 to $50 per credit hour approximates the unit cost for conventional instruction. Whether or not Coast Community College District can continue owning the telecasts and using them over and over without residual payments to the telecast instructor is open to question. The Chicago TV College pattern is more in accord with commercial television practices regarding the production and residual rights of the actors (instructors) than the Coast District. If a collective bargaining law is enacted in California the Coast College District may be forced to modify its practice to conform to that developed at Chicago TV College.

Faculty fear that the major purpose of the introduction of new teaching-learning modes is to increase faculty productivity, which in turn will lead to fewer instructors. In its extreme form the new modes transform instructors to managers of paraprofessionals, student aides, technicians and equipment. Their resistance to the new technologies has been largely responsible for the inability of colleges to increase productivity. As enrollments stabilize or decline resistance gets stiffer. The spread of collective bargaining is partly attributable to the faculty's perceived need to protect themselves against the demands of legislators, administrators and the public for increased workloads that endanger their jobs.

Of greater importance than workloads of television instructors is the quality of instruction. At the end of the first three years of experimental operation at Chicago TV College, the basic conclusion reached was:

> When evaluated by the techniques of measurement and analysis used in the experiment, television instruction is a thoroughly effective means of extending opportunities to at-home students in all the subject areas explored in the experiment.

More specifically the experimenters discovered "that apparently television is sometimes superior to, sometimes equal to, and sometimes inferior to conventional instruction (sometimes superior for the at-home group and sometimes inferior for the in-class group)." (A Fifth Report, 1974, p. 34). In other words there is no significant difference.

Summary and Conclusion

During the pre-World War II period teacher load policy was developed by administrators with little faculty participation. Since the colleges were governed by the same boards that governed the high schools it is not surprising that the junior college instructor's load in academic subjects was only slightly lower than that of

the high school teacher. In the technical, industrial, trade and physical education areas the teaching load closely approximated the 25 to 30 hour weekly load of high school teachers.

After World War II the situation changed slowly at first but more rapidly as the colleges began to separate from the public school system, as more became members of the regional accrediting associations of higher education, and as enrollments soared. Faculty members through their local and state associations exercised a great deal of influence on workloads. The trend was and continues to be in the direction of loads comparable to those in the four-year colleges.

Faculty workloads now are at their lowest level in the history of the community college. Not only have the weekly contact hours been reduced from an average range of 20 to 25 to 12 to 16, but the number of extra duties formerly required have been reduced or where performed are reimbursed through a reduction in contact hours or extra pay. Class size does not show the same reduction, since class size has a direct relationship to college enrollment. In addition, class size is often increased in return for a reduction in weekly contact hours. In small colleges, as the great majority were until the 1940's the average class size was low; as the colleges grew the class size increased. By 1953 the median for 23 California junior colleges was 21.9 with a range of the average class size of 13.6 to 29.7. The WSCH median was 429 with a range of the average WSCH of 301 to 549. Today, the median for class size and WSCH does not differ significantly from this except in colleges experimenting with large class instruction, an indication of the greater flexibility of class size than of contact hours. (Contra Costa Junior College District, 1953)

Workloads for instructors teaching in auto-tutorial laboratories, television, large forum-type classes have not yet been standardized. Colleges in which the new technologies of teaching have been introduced are experimenting with various patterns, usually modifications of the workloads common for instructors teaching in conventional classrooms. If adopted widely instructors will become television actors, managers of paraprofessionals and technicians and/or producers of course units and selectors of equipment.

Some colleges have increased productivity through these new technologies but the great majority have not. The new teching technologies have not produced the reduced costs many administrators had expected. Capital costs, excessive released time for instructors, low enrollment, large expenses for development or purchase of instructional programs and materials and for technicians overcome whatever savings may be made in lower teacher costs.

Probably, greater savings are being made by colleges that convince instructors to add a few students to each class than by colleges using the new technologies. However, the potential for converting education from a labor-intensive to a capital-intensive enterprise is great as is evident at Orange Coast (California) College.

The major influence on workload today and for the next five years, will be the relative bargaining strength of the employee and employer negotiators. What happens in colleges with collective bargaining agreements also influences workload

standards in colleges without such agreements. Appeals that financial survival depends upon some modest improvement in productivity do not impress faculty unless the crisis is immediate and likely to result in a reduction in force.

Much discussion on workload relates to its effect on quality of instruction. Hard data proving or disproving any relationship does not exist. Up to now consensus seems to be that class size has little influence on student learning; although there may be some effect on instructor fatigue and student preference and satisfaction. The number of weekly contact hours under today's workload formulas seems to have even less bearing on the issue. The spread of moonlighting made possible by lighter hour loads raises questions regarding the argument that lower hourly workloads are needed to enable instructors to do a better job of teaching.

The same uncertainty prevails over the superiority of one method or mode of teaching over another. The results of the Chicago TV College experiment can be used by either side — that television instruction is just as good as conventional class instruction or that it is no better. Similar remarks can be made of the other modes of instruction. The reason now given for adopting the new modes is that learning will be more effective if students (and instructors) can choose the mode that suits them best rather than to the superiority of one mode or another. In the background is the hope or the fear that the new modes will increase faculty productivity and reduce costs because fewer teachers will be needed.

Wherever they can, faculty press for a written policy on workload because of their prior experience with unwritten policies which gave administrative freedom to upwardly adjust teacher loads whenever confronted with unusually heavy enrollment or tight budgets. Faculty also insist upon penalty clauses which provide added compensation for hours or students in excess of the maximum stipulated in the written policy.

All collective bargaining agreements contain clauses on workload, most often in detail but occasionally by a statement that the workload will be in conformity with accepted college policy in the faculty manual or other official document. Faculty preference is for specific workload statements but sometimes employee representatives compromise on this issue because they do not consider it serious enough for holding up the contract. On their part employer representatives resist detailed workload statements to avoid demands for seemingly minor workload concessions that may lead to further demands in future negotiations.

If one may hazard a prediction in the normal classroom pattern of teaching it is unlikely that workloads will increase much above 15 weekly contact hours or that they will decrease below the twelve weekly contact hour base achieved institution-wide by the faculties of the Chicago City Colleges and several colleges in New York State and by a large number of English composition instructors in other colleges.

Class size will continue to fluctuate widely. Whereas the weekly hour load is usually specified in a contract or policy, the class size may be left for determination by the dean of instruction with provisions for faculty discussion and modification as at Moraine Valley College (Illinois) or limited by existing practice as at Henry Ford (Michigan). The average seems to hover around 35 students with a range of 25 to

50. Where large class sizes are accepted the hour load of instructors teaching such classes may be as low as nine and in a few instances, six.

It is also apparent that a large number of colleges are giving up the requirement that instructors spend a specified number of hours on campus whether or not they have scheduled classes. Less frequently colleges are relaxing rules limiting the instructor's freedom to engage in paid activity during the school week, evenings, and/or weekends. Even where such parietal rules are still retained administrators may ignore violations, except in flagrant cases involving a conflict with class assignments or violation of a state law.

Finally, it is unlikely that the labor-intensive characteristic of education will change significantly during the next five years, unless a repetition of the Great Depression should occur.

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